

## INTISARI

### **IDENTIFIKASI KARAKTERISTIK RESERVOAR BATUPASIR, BERDASARKAN ANALISA INVERSI P-WAVE MODEL BASE, LAPANGAN “JT” FORMASI PLOVER, SAHUL PLATFORM, BONAPARTE BASIN**

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Identifikasi Karakteristik reservoir berdasarkan analisa Inversi P-Wave yang telah dilakukan pada Lapangan “JT”, Formasi Plover, Sahul Platform, Bonaparte Basin dengan menggunakan data *Seismic Post Stack 2D* dan data Sumur sebagai data utama. . Penelitian ini menggunakan sebanyak 4 data sumur dan 122 *sesimic line*. selain itu juga digunakan data pendukung antara lain data informasi geologi dan stratigrafi, peta dasar(*Basemap*), data *checkshot*, data *marker*, dan *horizon*. Daerah telitian merupakan salah satu formasi dengan litologi batu lempung dengan sisipan batupasir.

Penelitian ini dilakukan dengan menganalisa karakter reservoir zona target dari data log, melakukan inversi P-Wave “*model base*”, untuk mengetahui sebaran reservoir. Setiap material bumi memiliki kecepatan gelombang P tertentu. Secara umum, kecepatan gelombang P (seismik refleksi) semakin meningkat dengan meningkatnya kekompakan suatu material.

Hasil analisis Inversi P-Wave pada lapangan “JT” menunjukkan bahwa pada Formasi Plover tersebut terdiri atas 2 zona yaitu zona A disekitar sumur East01, East02, West01 berkisar 2.240-3.500 (m/s) atau dibawah 3.500(m/s) dimana merupakan zona reservoir gas yang cenderung menyebar ke arah Timur-Laut, dan zona B disekitar sumur West02 yang merupakan zona Non Reservoir gas cenderung ke arah Barat-Daya. Hasil analisa sensitifitas log, reservoir gas formasi Plover memiliki sifat *low P-Wave*.

**Kata Kunci:** *Seismic Post Stack 2D, model base, Basemap, Checkshot, marker, low P-Wave*

## **ABSTRAC**

# **IDENTIFICATION CHARACTERISTICS RESERVOIR SANDSTONES, BASED ON INVERSION ANALYSIS P-WAVE MODEL BASED, IN THE FIELD “JT” PLOVER FORMATION, SAHUL PLATFORM, BONAPARTE BASIN (TIMOR SEA), EAST TIMOR**

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Identification Reservoir characteristics based on analysis of P-Wave Inversion has been done on the Field "JT", Plover Formation, Sahul Platform, Bonaparte Basin by using Post Stack 2D Seismic data and well data as primary data. This study uses data of 4 wells and 122 seismic line. It is also used supporting data as geological information and stratigraphic, base map, checkshot data, marker data, and the horizon. Survey area is one of the lithological formations with clay stones with inset sandstones.

This research was conducted by analyzing the character of the target reservoir zone of the log data, perform the inversion P-Wave "model base", to know the distribution of reservoir. Any material of the earth has a particular P wave velocity. In general, the P wave velocity (seismic reflection) increases with increasing compactness of a material.

The results of the analysis of P-Wave Inversion in the field "JT" indicates that the Plover Formation is composed of two zones, that is zone A around the wells East01, East02, West01 range 2.240-3.500 or under 3.500 (m/s) which is a zone of potential reservoir Gas that tends to spread North-East direction, and zones B around wells West02 which is a zone Non reservoir Gas tend to West direction. The results of sensitivity analysis of the log, the gas reservoir Plover formation has a low P-Wave.

**Keywords:** *Seismic Post Stack 2D, model base, Basemap, Checkshot, marker, low P-Wave.*